In the claims:

1 (Original) An isolated nucleic acid which comprises a nucleotide sequence which encodes a sugar-signalling transcription factor which is capable of activating a promoter of a gene encoding an enzyme involved in the synthesis or deposition of starch.

2 (Original) A nucleic acid as claimed in claim 1 wherein the transcription factor is a WRKY protein which is capable of activating the promoter within a plant in response to sugar levels in the plant

3 (Original) A nucleic acid as claimed in claim 2 wherein the promoter comprises at least one SURE element and\or W box element to which the transcription factor binds

4 (Currently amended) A nucleic acid as claimed in claim 3 wherein the promoter is selected from the ~~list~~ group consisting of[[:]] isol, sbe1, sbeIIb, ssI, and agpaseS.

5 (Currently amended) A nucleic acid as claimed in ~~any one of the preceding claims~~ claim 1 wherein the nucleotide sequence is a susiba2 nucleotide sequence which:
(i) encodes the SUSIBA2 polypeptide given in Figure 1, or
(ii) encodes a variant SUSIBA2 polypeptide which is a variant of the SUSIBA2 amino acid sequence given in Figure 1 and which shares at least about 50%, 60%, 70%, 80% or 90% identity therewith[[,]].

6 (Original) A nucleic acid as claimed in claim 5 wherein the nucleotide sequence:
(i) consists of the barley susiba2 coding sequence given in Figure 1 or one which is degeneratively equivalent thereto,
(ii) comprises a wheat or rice susiba2 coding sequence given

in the Sequence Annex, or one which is degeneratively equivalent to either.

7 (Currently amended) A nucleic acid as claimed in claim 5 wherein the susiba2 nucleotide sequence encodes a derivative of a susiba2 coding sequence selected from the group consisting of the barley susiba2 shown in Figure 1 or a sequence which is degeneratively equivalent thereto, a wheat susiba2 coding sequence or a sequence which is degeneratively equivalent thereto, a rice susiba2 coding sequence or a sequence which is degeneratively equivalent thereto ~~of claim 6~~ by way of addition, insertion, deletion or substitution of one or more codons.

8 (Original) A nucleic acid as claimed in claim 5 wherein the susiba2 nucleotide sequence consists of an allelic or other homologous or orthologous variant of the barley susiba2 coding sequence given in Figure 1.

9 (Currently amended) An isolated nucleic acid which comprises a nucleotide sequence which is the complement of the transcription factor-encoding nucleotide sequence of ~~any one of~~ claim~~s 1 to 8~~ 5.

10 (Original) An isolated nucleic acid for use as a probe or primer, said nucleic acid having a distinctive sequence of at least about 16-24 nucleotides in length, which sequence is present in Fig 1 or a sequence which is degeneratively equivalent thereto, or the complement of either.

11 (Currently amended) An isolated nucleic acid as claimed in claim 10 wherein the distinctive sequence encodes all or part of the SUSIBA2-specific sequence:

ppmknvvhqinsnmpssiggmmracearnytnqysqaa.

12 (Currently amended) A process for producing a nucleic acid as claimed in claim 7 ~~comprising the step of modifying a nucleic acid as claimed in claim 6~~.

13 (Currently amended) A method for identifying or cloning a nucleic acid as claimed in ~~claim 6 or~~ claim 8, which method employs a nucleic acid probe or primer having a distinctive sequence of at least about 16-24 nucleotides in length, which sequence is present in Fig 1 or a sequence which is degeneratively equivalent thereto, or the complement of either ~~as claimed in claim 10 or claim 11~~.

14 (Currently amended] A method as claimed in claim 13, which method comprises the steps of:
(a) providing a preparation of nucleic acid from a plant cell;
(b) providing ~~a nucleic acid molecule which is a nucleic acid~~ said nucleic acid probe or primer ~~as claimed in claim 10 or claim 11~~;
(c) contacting nucleic acid in said preparation of step (a) with said probe or primer ~~nucleic acid molecule~~ under conditions for hybridisation, and,
(d) identifying nucleic acid in said preparation which hybridises with said nucleic acid molecule.

15 (Currently amended) A method as claimed in claim 13, which method comprises the steps of:
(a) providing a preparation of nucleic acid from a plant cell;
(b) providing a pair of nucleic acid molecule primers suitable for PCR, ~~at least one of said primers being a nucleic acid primer as claimed in claim 10 or claim 11,~~
(c) contacting nucleic acid in said preparation with said primers under conditions for performance of PCR,
(d) performing PCR and determining the presence or absence of an amplified PCR product.

16 (Currently amended) A recombinant vector which comprises the nucleic acid of ~~any one of~~ claim~~s 1 to 8~~ 1.

17 (Original) A vector as claimed in claim 16 wherein the nucleic acid is operably linked to a promoter for transcription in a host cell, wherein the promoter is optionally an inducible promoter.

18 (Currently amended) A vector as claimed in claim 16 ~~or claim 17~~ which is a plant vector.

19 (Currently amended) A method which comprises the step of introducing the vector of ~~any one of~~ claim~~s~~ 16 ~~to 18~~ into a host cell, and optionally causing or allowing recombination between the vector and the host cell genome such as to transform the host cell.

20 (Currently amended) A host cell containing or transformed with a heterologous vector of ~~any one of~~ claim~~s~~ 16 ~~to 18~~.

21 (Currently amended) A method for producing a transgenic plant, which method comprises the steps of:
(a) ~~performing a method as claimed in claim 20 wherein the host cell is a plant cell~~ providing the host cell of claim 20,
(b) regenerating a plant from the transformed plant cell.

22 (Currently amended] A transgenic plant which is obtainable by the method of claim 17, or which is a clone, or selfed or hybrid progeny or other descendant of said transgenic plant, which in each case includes a heterologous nucleic acid ~~of any one of claims 1 to 8~~ which comprises a nucleotide sequence encoding a sugar-signalling transcription factor which is capable of activating a promoter of a gene encoding an enzyme involved in the synthesis or deposition of starch.

23 (Original) A transgenic plant as claimed in claim 22 which is a seed crop plant.

24 (Currently amended) A part of propagule from a plant as claimed in claim 22 ~~or claim 23~~, which ~~in either case~~ includes a heterologous nucleic acid which comprises a nucleotide sequence encoding a sugar-signalling transcription factor which is capable of activating a promoter of a gene encoding an enzyme involved in the synthesis or deposition of starch ~~of any one of claims 1 to 8~~, said plant optionally being a seed crop plant.

25 (Currently amended) An isolated polypeptide sugar-signalling transcription factor which is encoded by the nucleotide sequence of ~~any one of~~ claim~~s~~ 1 ~~to 8~~.

26 (Original) A polypeptide as claimed in claim 25 which is the SUSIBA2 polypeptide shown in Fig 1.

27 (Cancelled)

28 (Currently amended) A method for activating the promoter of a gene encoding an enzyme involved in the synthesis or deposition of starch in a plant,

wherein the promoter is activated by a sugar-signalling transcription factor,

which method comprises the step of causing or allowing expression of a heterologous nucleic acid as claimed in ~~any one of~~ claim~~s~~ 1 ~~to 8~~ within the cells of the plant, thereby expressing the transcription factor therein.

29 (Original) A method as claimed in claim 28 which is preceded by the earlier step of introduction of the heterologous nucleic acid into a cell of the plant or an

ancestor thereof.

30 (Currently amended) A method for modulating the activity of a promoter of a gene encoding an enzyme involved in the synthesis or deposition of starch in a plant,

wherein the promoter is activated by a sugar-signalling transcription factor,

which method comprises any of the following steps of:

(i) introducing all or part of a nucleic acid as claimed in claim 9 in the plant such as to reduce transcription factor expression by an antisense ODN mechanism;

(ii) causing or allowing transcription from part of a nucleic acid which comprises a nucleotide sequence encoding a sugar-signalling transcription factor which is capable of activating a promoter of a gene encoding an enzyme involved in the synthesis or deposition of starch ~~as claimed in any one of claims 1 to 8~~ such as to reduce transcription factor expression by co-suppression;

(iii) ~~use of~~ providing a nucleic acid encoding a ribozyme specific for a nucleic acid which comprising a sequence encoding a sugar-signalling transcription factor which is capable of activating a promoter of a gene encoding an enzyme involved in the synthesis or deposition of starch ~~as claimed in any one of claims 1 to 8~~,

(iv) ~~use of~~ providing a double-stranded RNA which comprises an RNA sequence encoding part of a sugar-signalling ~~the~~ polypeptide ~~of claim 25~~, which is optionally a siRNA duplex consisting of between 20 and 25 ~~bps~~base pairs.

31 (Currently amended) A method of producing modified starch anabolism activity in plant comprising use of a method of ~~any one of~~ claim~~s~~ 28 ~~to 30~~, and optionally recovering starch from the plant.

32 (Original) A method of binding, activating, or identifying

a promoter which includes at least one SURE element and\or W box element, which method employs the step of contacting said promoter with a polypeptide of claim 25.

33 (Original) A method of investigating or confirming whether a cis promoter element is present in a plant transcription factor consensus sequence in a target gene promoter, the method comprising:
(i) observing the expression of a reporter gene operably linked to the promoter in a plant cell in which the transcription factor is present,
(ii) introducing into the plant cell a double stranded oligodeoxynucleotide (ODN) decoy corresponding to the promoter element into the cell,
(iii) observing the expression of the reporter gene in the presence of the ODN decoy,
wherein a reduction in expression from (i) to (iii) confirms that the plant transcription factor binds the promoter element.

Claims 34-37 (Cancelled)